

IN THE DRAWINGS

The attached sheets of drawings include changes to Figs. 6, 16-17 and 21-28. These sheets, which include Figs. 6, 16-17 and 21-28, replace the original sheets including Figs. 6, 16-17 and 21-28.

Attachment: Replacement Sheets

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 40-48 and 55-78 are presently active, Claims 1-39 have been previously canceled without prejudice, Claims 49-54 are canceled without prejudice by the present amendment, Claims 40-45, 48, 58-60 and 62 are amended. No new matter is added.

In the outstanding Office Action, the title of the specification was objected to as not descriptive. Figures 6, 16-17 and 21-28 were objected to because of informalities. Claims 41-43 were objected to because of informalities. Claims 40-41, 43, 45-58 and 60-63 were rejected under 35 U.S.C. § 102(b) as anticipated by JP 11-196540. Claim 42 was rejected under 35 U.S.C. § 103(a) as unpatentable over JP 11-196540 in combination with Osinga et al. (US 7,081,739). Claim 44 was rejected under 35 U.S.C. § 103(a) as unpatentable over JP 11-196540. Claim 59 was rejected under 35 U.S.C. § 103(a) as unpatentable over JP 11-196540. Claims 64-78 were indicated as allowed.

Regarding the objection to the drawings, on the replacement sheets, Figs. 6, 16-17 and 21-28 are amended to address the informalities. Thus, it is respectfully submitted that the objection to the drawings is overcome.

Regarding the objection to Claims 41-43, Claims 41-43 are amended to address the informalities. Thus, it is respectfully submitted that the objection to Claims 41-43 is overcome.

Regarding the rejections under 35 U.S.C. § 102 and § 103, Applicants respectfully submit that the rejections are overcome because, in Applicants' view, amended independent Claims 40, 45, 58, 60 and 62 and previously presented independent Claims 55 and 56 patentably distinguish over the applied references as discussed below.

Claim 40 is amended to recite, *inter alia*, “a power supply unit that is disposed independent of the power source and supplies the start-up energy and the operation energy to the booster circuit.”¹

Instead, JP 11-196540 describes that a booster circuit 20 is connected to a generator 12, which supplies a target voltage to be boosted, and an oscillation circuit 18, which controls the booster circuit 20. However, the start-up energy and the operation energy of the oscillation circuit 18 are supplied by the generator 12 through an oscillation control unit 16. That is, the start-up energy and the operation energy of the oscillation circuit 18 are not supplied independently from the generator 12, which generates a target to be boosted.

Thus, JP 11-196540 fails to teach or suggest “a power supply unit that is disposed independent of the power source and supplies the start-up energy and the operation energy to the booster circuit,” as recited in Claim 40.

Claim 45 is amended to recite, *inter alia*, “a power supply unit that is disposed independent of the power source and supplies the start-up energy”²

As discussed above, in JP 11-196540, the start-up energy and the operation energy of the oscillation circuit 18 are not supplied independently from the generator 12, which generates a target to be boosted.

Thus, JP 11-196540 fails to teach or suggest “a power supply unit that is disposed independent of the power source and supplies the start-up energy,” as recited in Claim 45.

Claim 55 recites, *inter alia*, “a storage element that stores the boosted output and generates a constant voltage output, and feeds back the constant voltage output as the start-up energy and the operation energy to the booster circuit.”

Instead, JP 11-196540 discloses a secondary battery (22), to which a boosted output from a booster circuit (20) is supplied. However, the secondary battery (22) does not feed

¹ See Specification, for example, at page 17, lines 11-24.

² See Specification, for example, at page 20, line 23 through page 21, line 2 and Fig. 2.

back a constant voltage output as a start-up energy and an operation energy to the booster circuit (20).

Thus, JP 11-196540 fails to teach or suggest “a storage element that stores the boosted output and generates a constant voltage output, and feeds back the constant voltage output as the start-up energy and the operation energy to the booster circuit,” as recited in Claim 55.

Likewise, JP 11-196540 fails to teach or suggest “a storage element that stores the boosted output input through a rectifier element connected in a forward direction between the booster circuit and the storage element and generates a constant voltage output, and outputs the start-up energy,” as recited in Claim 56.

Claim 58 recites, *inter alia*, “a switching unit that is supplied with the start-up energy from the power supplying unit and performs output control of the start-up energy.”

The Office Action asserts that a PMOS transistor (42, 82) corresponds to a switching unit recited in Claim 58 (Office Action at page 4, paragraph 8). However, the PMOS transistor (42, 82) is connected to a terminal (30), to which an operation energy, not a start-up energy, is supplied.

Thus, JP 11-196540 fails to teach or suggest “a switching unit that is supplied with the start-up energy from the power supplying unit and performs output control of the start-up energy,” as recited in Claim 58.

Similar arguments set forth above for Claim 58 apply to Claims 60 and 62.

Last, in this Office Action, Osinga et al. is cited for the rejection of original Claim 42. However, Applicants respectfully note that Osinga et al. also fails to teach or suggest the elements above, as recited in Claims 40, 45, 55-56, 58, 60 and 62.

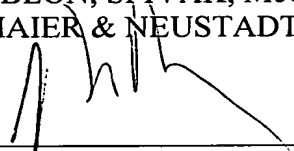
Accordingly, independent Claims 40, 45, 55-56, 58, 60 and 62 patentably distinguish over the applied references. Therefore, Claims 40, 45, 55-56, 58, 60 and 62 and the pending

Claims 41-44, 46-48, 57, 59, 61 and 63 dependent from Claims 40, 45, 56, 58, 60 and 62 are believed to be allowable.

Consequently, in view of the present amendment and in light of the above discussions, it is believed that the outstanding rejection is overcome, and the application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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